

IN THE CLAIMS

Kindly replace the prior claims listing by the following listing.

1. (original): A biocatalyst having alcohol dehydrogenase activity which can be obtained from *Rhodococcus*.
2. (currently amended): The biocatalyst according to claim 1, obtained from *Rhodococcus ruber* DSM 14855.
3. (original): The biocatalyst according to claim 1 which shows stereospecific alcohol dehydrogenase activity in the oxidation of secondary alcohols or the reduction of ketones.
4. (original): The biocatalyst according to claim 1 in purified form.
5. (previously presented): The biocatalyst according to claim 1 having a molecular weight on denaturing SDS polyacrylamide electrophoresis from 32 to 44 kDa.
6. (previously presented): The biocatalyst according to claim 1 having a molecular weight according to size exclusion chromatography of 55 to 69 kDa.
7. (original): The biocatalyst according to claim 1 comprising Zn²⁺ bound to the molecule.
8. (previously presented): The biocatalyst according to claim 1 including the partial sequence EVGADAAAR (SEQ ID No: 1) within the total sequence of at least one polypeptide forming the whole or part of the enzyme, or wherein one of the amino acids mentioned in the partial sequence is exchanged against a different amino acid.
9. (original): The biocatalyst according to claim 1 including the partial sequence TD[L/I]FEVVA[L/I]AR (SEQ ID NO: 2) within the total sequence of at least one polypeptide forming the whole or part of the enzyme, where [L/I] is leucine or isoleucine, or wherein one of the amino acids mentioned in the partial sequence is exchanged against a different amino acid.
10. (original): The biocatalyst according to claim 1 including the partial sequence SGAGAADA[L/I]R (SEQ ID NO: 3) within the total sequence of at least one polypeptide forming

the whole or part of the enzyme, where [L/I] is leucine or isoleucine, or wherein one of the amino acids mentioned in the partial sequence is exchanged against a different amino acid.

11. (original): The biocatalyst according to claim 1 including the partial sequence V[L/I]AVD[L/I]DDDE (SEQ ID NO: 4) within the total sequence of at least one polypeptide forming the whole or part of the enzyme, where [L/I] is leucine or isoleucine, or wherein one of the amino acids mentioned in the partial sequence is exchanged against a different amino acid.

12. (previously presented): The biocatalyst according to claim 1 including the partial sequence V[L/I]AVD[L/I]DDDXRX (SEQ ID NO: 5) within the total sequence of at least one polypeptide forming the whole or part of the enzyme, where [L/I] is leucine or isoleucine and X stands for an unidentified amino acid, or wherein one of the amino acids mentioned in the partial sequence is exchanged against a different amino acid.

13. (previously presented): The biocatalyst according to claim 1 including the partial sequence [TD/DT] [L/I]MEVVA[L/I]AR (SEQ ID NO: 6, either with TD in the beginning or with DT in the beginning) within the total sequence of at least one polypeptide forming the whole or part of the enzyme where the sequence in brackets is selected from the two alternatives mentioned therein and where [L/I] is leucine or isoleucine, or wherein one of the amino acids mentioned in the partial sequence is exchanged against a different amino acid.

14. (original): A recombinant biocatalyst according to claim 1.

15. (previously presented): A biocatalyst according to claim 1, which shows alcohol dehydrogenase activity in the presence of up to 50 percent by volume of isopropanol, or in the presence of up to 20 percent by volume of acetone.

16-17 (cancel).

18 (cancelled).

19-36 (cancel).

3637. (previously presented): A polypeptide showing alcohol dehydrogenase activity of the sequence with SEQ ID NO: 48:

MKAVQYTEIG SEPVVVDIPT PTPGPGEILL KVTAAGLCHS DIFVMDMPAA QYAYGLPLTL 60
GHEGVGTVAE LGEGVTGFGV GDAVAVYGPW GCGACHACAR GRENYCTRAA DLGITPPGLG 120
SPGSMAEYMI VDSARHLVPI GDLDPVAAAP LTDAGLTPYH AISRVLPLLG PGSTAVVIGV 180
GGLGHVGIQI LRAVSAARVI AVDLDDDRLLA LAREVGADAA VKSGAGAADA IRELTGGQGA 240
TAVFDFVGAQ STIDTAQQVV AVDGHISVVG IHAGAHAKVG FFMIPFGASV VTPYWGTRSE 300
LMEVVALARA GRLDIHTETF TLDEGPAAYR RLREGSIRGR GVVVP 345

as well as truncated or elongated versions thereof or those with amino acid replacements of up to 5 % of the number of amino acids forming part of the sequence given under SEQ ID NO: 48 and/or insertions, sequence extensions or deletions or combinations of two or more thereof, provided that the resulting polypeptide still displays an alcohol dehydrogenase activity.

38. (original): A polypeptide according to claim 37 with the sequence given as SEQ ID NO: 48 or a version thereof wherein up to three percent of the amino acids are replaced by other amino acids.

39. (previously presented): A polypeptide according to claim 37 with the sequence given as SEQ ID NO: 48 or a version thereof wherein up to 3 amino acids are replaced by other amino acids.

40. (previously presented): A polypeptide according to claim 37 with the sequence of SEQ ID NO: 48.

41. (previously presented): A polypeptide according to claim 37 that has at least one of the following properties:

pH optimum in the reduction of ketones in the presence of NADH: pH 6 to pH 7;

pH optimum in the oxidation of alcohols in the presence of NAD⁺: pH 8.5 to pH 9.5;

temperature optimum in the reduction of ketones in the presence of NADH: between 43 and 65 °C;

temperature optimum in the oxidation of secondary alcohols in the presence of NAD⁺: between 43 and 65 °C;

temperature stability under the conditions just given for the temperature optimum at 50 °C less than 35 % activity loss during 24 hours;

stability also in the presence of up to 50 percent by volume of isopropanol;

stability also in the presence of up to 20 percent by volume of acetone.

42. (previously presented): A polypeptide according to claim 41 with alcohol dehydrogenase activity that has all of the properties given in claim 41.

43-44 (cancel).